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ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY CLASS I PERMIT

COMPANY: **Chemical Lime Company**
FACILITY: **Douglas Lime Plant**
PERMIT #: **1000044**
DATE ISSUED: **June 25, 2002**
EXPIRY DATE: **June 25, 2007**

ABSTRACT

This Class I permit is issued to Chemical Lime Company, Permittee, for operation of their Lime Plant located at Paul Spur, approximately 10 miles west of Douglas, Cochise County, Arizona.

Permittee operates a Lime Plant near Douglas, AZ. The facility consists of three lime kilns, miscellaneous lime handling equipment including conveyor belts, storage bins, crushers, and mills, and associated air pollution control equipment.

This permit is issued in accordance with Title 49, Chapter 3 of the Arizona Revised Statutes. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (AAC) and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. This permit also contains conditions from the PM_{10} State Implementation Plan for the Paul Spur Group I Area (PSSIP), dated July 1990, prepared by the Office of Air Quality, Arizona Department of Environmental Quality. All terms and conditions in this permit, except those derived from PSSIP, are enforceable by the Administrator of the U.S. Environmental Protection Agency. The permit conditions derived from PSSIP are state-enforceable only.

The potential emission rates of the following pollutants are greater than major source thresholds: (i) particulate matter with an aerodynamic diameter less than 10 microns, (ii) sulfur dioxide, (iii) nitrogen oxides, and (iv) carbon monoxide. Therefore, the facility is classified as a major source as defined in AAC R18-2-101(64), and requires a Class I permit pursuant to AAC R18-302(B)(1)(a).

TABLE OF CONTENTS

ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. 1000044
for
Chemical Lime Company, Douglas Lime Plant

I. PERMIT EXPIRATION AND RENEWAL

[A.R.S. § 49-426.F, AAC R18-2-304(C)(2), 306(A)(1), and 322]

A. This permit is valid for a period of five years from the date of issuance of the permit.

B. Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS

[AAC R18-2-306(A)(8)(a) and (b), A.R.S. § 49-463, and A.R.S. §49-464]

A. Permittee shall comply with all the conditions contained in Attachments "A", "B", "C", "D", and "E" of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act (Act).

B. Need to halt or reduce activity not a defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

[AAC. R18-2-306(A)(8)(c) and 321(A)]

A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B. The permit shall be reopened and revised under any of the following circumstances:

1. Additional applicable requirements under the Act become applicable to the Class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after

promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Paragraph III(B)(1) above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Paragraph III(B)(1) of this Attachment shall not result in a resetting of the five year permit term.

IV. POSTING OF PERMIT

[AAC R18-2-315]

A. Permittee shall post this permit, or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:

1. Current permit number.

2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.

B. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT

[AAC R18-2-326 and 306)(A)(9)]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and AAC R18-2-326.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE [AAC R18-2-327]

A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.

B. The questionnaire shall be on a form provided by the Director and shall include the information required by AAC R18-2-327.

VII. COMPLIANCE CERTIFICATION [AAC R18-2-309(2)(a), -309(2)(c), -309(2)(d), -309(5)(d)]

A. Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15th, and shall report the compliance status of the source during the period between October 1st of the previous year, and March 31st of the current year. The second certification shall be submitted no later than November 15th, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year. A copy of all compliance certifications for Class I permits shall also be submitted to the EPA Administrator.

The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;

2. Identification of the methods or other means used by Permittee for determining the compliance status with each term and condition during the certification period, and whether the methods or means provide continuous or intermittent data;

3. The status of compliance with the terms and conditions of this permit for the period covered by the certification, based on the methods or means designated in Paragraph VII(A)(2) above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;

4. For emission units subject to 40 CFR part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exccedance defined under 40 CFR Part 64 occurred;

5. All instances of deviations from permit requirements reported pursuant to Part XII(B) of this Attachment; and

6. Other facts that the Director may require to determine the compliance status of the source;

B. A copy of all compliance certifications shall also be submitted to the EPA Administrator.

C. If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Part VII(A) above.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

[AAC R18-2-309(3)]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY

[AAC R18-2-309(4)]

Permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

A. Enter upon Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard. [AAC R18-2-304(C)]

XI. ACCIDENTAL RELEASE PROGRAM

If this source becomes subject to the provisions of 40 CFR Part 68, then Permittee shall comply with these provisions according to the timeline specified in 40 CFR Part 68.
[40 CFR 68]

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting [AAC R18-2-310.01(A) and -310.01(B)]

1. Excess emissions shall be reported as follows :

a. Permittee shall report to the Director any emissions in excess of the limits established by this permit. The report shall be in two parts as specified below:

(1) Notification by telephone or facsimile within 24 hours of the time when Permittee first learned of the occurrence of excess emissions including all available information from Sub-Paragraph XII(A)(1)(b) of this Attachment.

(2) Detailed written notification within 72 hours of the notification pursuant to Condition XII(A)(1)(a)((1)) of this Attachment.

b. The report shall contain the following information:

(1) Identity of each stack or other emission point where the excess emissions occurred.

(2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.

(3) Date, time and duration or expected duration of the excess emissions.

(4) Identity of the equipment from which the excess emissions emanated.

(5) Nature and cause of such emissions.

(6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.

(7) Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

2. In the case of continuous or recurring excess emissions, the notification requirements of Part XII(A) shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to Paragraph XII(A)(1) of this Attachment.

B. Permit Deviations Reporting [AAC R18-2-306(A)(5)]

1. Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.

2. All instances of deviations from permit requirements shall be clearly identified in the required semiannual monitoring report specified in Part I(B) of Attachment "B" and shall be certified by the responsible official.

[AAC R18-2-306(A)(5)(a)]

C. Emergency Provision [AAC R18-2-306(E)]

1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed

equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Paragraph XII(C)(3) is met.

3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An emergency occurred and that Permittee can identify the cause(s) of the emergency;

   b. The permitted facility was being properly operated at the time;

   c. During the period of the emergency, Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

   d. Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

4. In any enforcement proceeding, Permittee seeking to establish the occurrence of an emergency has the burden of proof.

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. For any excess emission or permit deviation that cannot be corrected within 72 hours, Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

[A.R.S. 49-426(I)(5)]

E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

[AAC R18-2-310]

1. *Applicability*

This rule establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

a. Promulgated pursuant to Sections 111 or 112 of the Act;

b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;

c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;

d. Contained in AAC R18-2-715(F); or

e. Included in a permit to meet the requirements of AAC R18-2-406(A)(5).

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if Permittee has complied with the reporting requirements of AAC R18-2-310.01 and has demonstrated all of the following:

a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of Permittee;

b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, Permittee satisfactorily demonstrated that the measures were impracticable;

d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods

of such emissions;

e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;

i. All emissions monitoring systems were kept in operation if at all practicable; and

j. Permittee's actions in response to the excess emissions were documented by contemporaneous records.

3. Affirmative Defense for Startup and Shutdown

a. Except as provided in Sub-Paragraph XII(E)(3)(b) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if Permittee has complied with the reporting requirements of AAC R18-2-310.01 and has demonstrated all of the following:

(1) The excess emissions could not have been prevented through careful and prudent planning and design;

(2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

(3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

(4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

(5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

(6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

(7) All emissions monitoring systems were kept in operation if at all practicable; and

(8) Permittee's actions in response to the excess emissions were documented by contemporaneous records.

b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Paragraph XII(E)(2) above.

4. Affirmative Defense for Malfunctions During Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Paragraph XII(E)(2) above.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Paragraphs XII(E)(2) or XII(E)(3) above, Permittee shall demonstrate, through submission of the data and information required by Part XII(E) and AAC. R18-2-310.01, that all reasonable and practicable measures within Permittee's control were implemented to prevent the occurrence of the excess emissions.

XIII. RECORD KEEPING REQUIREMENTS [AAC R18-2-306(A)(4)]

A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:

1. The date, place as defined in the permit, and time of sampling or measurements;

2. The date(s) analyses were performed;

3. The name of the company or entity that performed the analyses;

4. A description of the analytical techniques or methods used;

5. The results of such analyses; and

6. The operating conditions as existing at the time of sampling or measurement.

B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

XIV. REPORTING REQUIREMENTS [AAC R18-2-306(A)(5)(a)]

Permittee shall submit the following reports :

A. Compliance certifications in accordance with Section VII of Attachment "A".
B. Reports of excess emissions, permit deviations, and emergencies in accordance with Section XII Attachment "A".
C. Other reports required by Attachment "B" and Attachment "D".

XV. DUTY TO PROVIDE INFORMATION [AAC R18-2-304(G) and 306(A)(8)(e)]

A. Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.

B. If Permittee has failed to submit any relevant facts or if Permittee has submitted incorrect

information in the permit application, Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XVI. PERMIT AMENDMENT OR REVISION [AAC R18-2-318, 319 and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

A. Administrative Permit Amendment (AAC R18-2-318);

B. Minor Permit Revision (AAC R18-2-319);

C. Significant Permit Revision (AAC R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT PERMIT REVISION [AAC R18-2-317]

A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).

2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.

3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.

4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).

5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Parts

(A) and (C) of this Section.

C. For each such change under Parts (A) and (B) of this Section, a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible. Each notification shall include:

1. When the proposed change will occur.

2. A description of each such change.

3. Any change in emissions of regulated air pollutants.

4. The pollutants emitted subject to the emissions trade, if any.

5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.

6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.

7. Any permit term or condition that is no longer applicable as a result of the change.

XVIII. PERFORMANCE TESTING REQUIREMENTS [AACR18-2-312]

A. Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

B. Operational Conditions During Performance Testing

Performance tests shall be conducted during operation at no less than 90% of the maximum possible capacity of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in AAC R18-2-101) shall not constitute representative operational conditions unless otherwise specified in

the applicable standard.

C. Performance tests shall be conducted and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to AAC R18-2-312.B.

D. Performance Test Plan

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with the Arizona Testing Manual. This test plan must include among others identified in the Arizona Testing Manual the following:

1. test duration;
2. test location(s);
3. test method(s); and
4. source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director, or Director's designee, is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond Permittee's control. Termination of any test without good cause

after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

G. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and AAC R18-2-312.A.

XIX. PROPERTY RIGHTS [AAC R18-2-306(A)(8)(d)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XX. SEVERABILITY CLAUSE [AAC R18-2-306(A)(7)]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

ATTACHMENT "B": SPECIFIC PROVISIONS

Air Quality Control Permit No. 1000044
For
Chemical Lime Company, Douglas Lime Plant

{Reading Note: In this Attachment there are many instances where requirements in different parts of the permit have to be cross-referenced. To streamline the cross-referencing procedure, and to reduce ambiguity, the following naming convention has been adopted - Level 1 : Section ; Level 2: Part; Level 3:Paragraph; Level 4:Sub-Paragraph; Level 5: Condition. For example, requirements for the Limestone Processing Plant are in Section II. The requirements for the Primary crusher are in Part II(A). The Emission Standards for the Primary Crusher are in Paragraph II(A)(1). The opacity standard for the Primary Crusher is in Sub-Paragraph II(A)(1)(a). When a fifth level appears, it is referred to as a "Condition".}

I. General Requirements

A. Within 30 days of issuance of this permit the owner or operator shall have on site or on

call a person that is certified in EPA Reference Method 9.

[AAC R18-2-306(A)(3)(c)]

B. Permittee shall submit the following reports :

1. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, Permittee shall submit reports of all monitoring activities required by this Attachment performed in the same six month period as applies to the compliance certification period. [AAC R18-2-306(A)(5)(a)]

2. Permittee shall submit excess emissions and continuous monitoring system performance reports according to the schedule in Sub-Paragraph I(B)(2)(c). This report shall include the following:

[AAC R18-2-306(A)(3)(c), Permit 0368-93 Attachment A, IX(B)]

a. For each continuously monitored point, the following information shall be provided :

(1) The total number of operating hours of the kiln.

(2) For each opacity monitor, the number and duration of monitor downtime incidents in total and totalized for each of the following standard causes :

(a) Monitor equipment malfunction,
(b) Non-monitor equipment malfunction,
(c) Quality assurance,
(d) Other known cause,
(e) Unknown cause.

(3) For opacity, the number and duration of periods of excess emissions (i.e., periods in which the monitor records an average six-minute opacity in excess of forty percent) in total and totalized for each of the following standard causes :

(a) Start-up,
(b) Shutdown,
(c) Control equipment failure,
(d) Process problems,
(e) Other known cause,
(f) Unknown cause.

(4) The excess emissions and continuous monitoring system performance

report shall include an attachment containing the following information :

(a) The magnitude of the six-minute periods during which emissions exceed forty percent, including any conversion factor(s) used; date, starting and ending time, nature, cause, and corrective action taken for each excess emissions, and a specific identification of each period of excess emissions that occurred during start-ups, shutdowns, and malfunctions and the corrective action taken.

(b) The date, starting and ending times of each instance when any monitor was inoperative (except for zero and span checks, etc.), and the description of the nature, cause, and corrective action taken for each such period.

b. The excess emissions and continuous monitoring system performance report shall contain an attachment providing, for each lime kiln, a summary of all periods in which the bypass dampers are opened, or when the scrubber water flow rate is below the range established in Sub-Paragraph VIII(B)(3)(c) of this Attachment. The summary shall include the starting period and duration of each period.

c. The excess emissions and continuous monitoring systems reports shall be submitted no later than 30 days after the end of the monitoring period. The first monitoring period shall correspond to the calendar quarter when this permit is issued. Subsequent monitoring periods shall be as follows :

(1) Each quarter if the total duration of excess emissions is 1 percent or greater of the total operating time, or the total continuous monitoring system downtime is 5 percent or greater of the total operating time.

(2) Each semiannual period if the total duration of excess emissions for each quarter in the semiannual period is less than 1 percent of the total operating time and the continuous monitoring system downtime for each quarter in the semiannual period is less than 5 percent of the total operating time.

C. For the purposes of this permit, Control Device Monitoring and Maintenance Procedure shall refer to the following methodology :

1. Recording of differential pressure across the pollution control device. If the device is not equipped with a differential pressure measurement gauge, Permittee shall

install one within 60 days of permit issuance.

2. Verification of the pulse timing sequence of the pollution control device for the baghouses.

3. Inspection according to a plan that contains at least the following elements : (i) inspection of baghouse cleaning system and fan; (ii) internal inspection of the baghouse components including bags, hoppers, and shell. Permittee shall record the various components of the system that have been inspected.

4. Scheduling of any required maintenance that is identified by the inspection. If maintenance is required, Permittee shall record details of the type of maintenance and the date the maintenance was performed. If maintenance is not required, Permittee shall record the fact that maintenance is not required.

D. For the purposes of this permit, Visible Emissions Observation Procedure shall refer to the following methodology :

1. Within 30 days of issuance of this permit, Permittee shall submit a visual observation plan to be approved by the Department. The observation plan shall identify a central lookout station or multiple observation points, as appropriate, from where the sources shall be monitored. When multiple observation points are used, all the sources associated with each observation point shall be specifically identified within the observation plan.

2. A certified Method 9 observer shall conduct a visual survey of visible emissions from the sources in accordance with the observation plan, under normal representative operating conditions. The survey shall be conducted at the frequency specified in the permit condition that refers to this procedure. Permittee shall keep a record of the name of the observer, the date and time on which the observation was made, the location(s) of the observation, and the results of the observation.

3. If the observer sees a plume from a source that on an instantaneous basis appears to exceed the applicable opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

4. If the six-minute opacity of the plume is less than the applicable opacity standard, the observer shall make a record of the following:

   a. Location, date, and time of the observation; and
   b. The results of the Method 9 observation.

5. If the six-minute opacity of the plume exceeds the applicable opacity standard, then Permittee shall do the following:

    a. Adjust or repair the controls or equipment to reduce opacity to below the applicable opacity standard;
    b. Report as an excess emission in accordance with Section XII of Attachment "A" of this permit; and
    c. Conduct a six-minute Method 9 observation reading within 48 hours after taking corrective action. The results of this observation include date, time, and location shall be recorded.

6. Any changes to the observation plan, originally approved by the Department, shall be made only with the prior approval of the Director.

E. For the purposes of this Attachment, the following definitions shall be used :

1. "Process source" means the last operation or process which produces an air contaminant resulting from either :

    a. The separation of the air contaminants from the process material, or
    b. The conversion of constituents of the process materials into air contaminants which is not an air pollution abatement operation.

[AAC R18-2-701(22)]

2. "Process weight" means the total weight of all materials introduced into a process source, including fuels, where these contribute to pollution generated by the process.

[AAC R18-2-701(23)]

3. "Process weight rate" shall be determined as follows :

    a. For continuous or long run, steady-state process sources, the process weight rate shall be the total process weight rate for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.

    b. For cyclical or batch process sources, the process weight rate shall be the total process weight rate for a period which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such period.

[AAC R18-2-702(E)]

F. None of the permit conditions in this Attachment that are based on the $\underline{PM_{10}}$ STATE

IMPLEMENTATION PLAN FOR THE PAUL SPUR GROUP I AREA, *dated July 1990, prepared by the Office of Air Quality, Arizona Department of Environmental Quality*, hereinafter also referred to as "PSSIP" shall be modified or amended in any way without PSSIP being first amended to reflect or allow such a modification or amendment.

[Permit 0368-93 Attachment A, X(J)]

G. The following methods and procedures shall be used while conducting performance tests on equipment subject to Sections V, VI, VII, and VIII :

[AAC R18-2-720(H)]

1. The reference methods in 40 CFR 60, Appendix A shall be used as follows :

   a. Method 5 for the measurement of particulate matter;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow;
   d. Method 3 for gas analysis;
   e. Method 4 for stack gas moisture;
   f. Method 9 for visible emissions.

2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.85 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director.

II. Limestone Processing Plant

A. Primary Crusher/DC 146, Secondary Crusher/DC 147, Secondary Screen/ DC 148

1. Emission Limits/Standards

   a. The opacity of any plume or effluent from each of DC 146, DC 147, and DC 148 stacks shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

   [AAC R18-2-702(B)]

   b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from each of DC 146, DC 147, and DC 148 stacks, particulate matter in excess of the amounts calculated by the following equation :

   $$E = 55.0\ P^{0.11} - 40$$

   where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

   [AAC R18-2-720(B)(2)]

c. For the purposes of this permit, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter. [AAC R18-2-720(D)]

2. Air Pollution Control

At all times that the Primary Crusher is operated, DC 146 shall be operated. At all times that the Secondary Crusher is operated, DC 147 shall be operated. At all times that the Secondary Screen is operated, DC 148 shall be operated. This is a material permit condition in accordance with AAC R18-2-331(A)(3)(e).
[PSSIP 6.4, AAC R18-2-306(A)(2)]

3. Monitoring, Reporting, Recordkeeping

a. Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from Primary Crusher/DC 146, Secondary Crusher/DC 147, and Secondary Screen/DC 148.
[AAC R18-2-306(A)(3(c)]

b. Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Part I(C) of this Attachment, once every month to monitor emissions from Primary Crusher/DC 146, Secondary Crusher/DC 147, and Secondary Screen/DC 148.
[AAC R18-2-306(A)(3(c)]

c. Permittee shall submit semiannual reports containing the following information along with the compliance certification required by Section VII of Attachment A :

(1) For each month, the number of days in which the crushing plant crushed rock.
(2) For each month, the quantity of rocks (in tons) crushed by the crushing plant.
[Permit 0368-93 Attachment A, IX(A)(1)]

4. Permit Shield

Compliance with the terms of Part II(A) of this Attachment shall be deemed compliance with AAC R18-2-702(B), AAC R18-2-720(B)(2), and Permit 0368-93 Attachment A, IX(A)(1) for Primary Crusher/DC146, Secondary Crusher/DC 147, and Secondary Screen/DC 148.

[AAC R18-2-325]

B. Primary Screen, #1 Secondary Screen,#2 Secondary Screen, #3 Secondary Screen

1. Emission Limits/Standards

The opacity of any plume or effluent from each of Primary Screen, #1 Secondary Screen, #2 Secondary Screen, and #3 Secondary Screen shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

2. Air Pollution Control

Permittee shall operate with an enclosure over each of Primary Screen, #1 Secondary Screen, #2 Secondary Screen, and #3 Secondary Screen. This is a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[PSSIP 6.4]

3. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from Primary Screen, #1 Secondary Screen, #2 Secondary Screen, and #3 Secondary Screen.

[AAC R18-2-306(A)(3(c)]

4. Permit Shield

Compliance with the terms of Part II(C) of this Attachment shall be deemed compliance with AAC R18-2-702(B) for Primary Screen, #1 Secondary Screen, #2 Secondary Screen, and #3 Secondary Screen.

[AAC R18-2-325]

III. Open Areas, Roadways/Streets, Material Handling, Storage Piles

A. Emission Limits/Standards

1. Permittee shall not cause, allow or permit visible emissions from open areas, roadways and streets, storage piles or material handling in excess of 40 % opacity measured in accordance with the Arizona Testing Manual, Reference Method 9.

[AAC R18-2-612]

2. Permittee shall employ at least one of the following reasonable precautions, or any other method as proposed by Permittee and approved by the Director (following compliance with any applicable air permit revision mechanism), to prevent excessive amounts of particulate matter from becoming airborne:

a. Use dust suppressants or soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, or barring access when constructing, using, altering, repairing, demolishing, clearing, or leveling a building or its appurtenances, a driveway, a parking area, or a vacant lot, or when moving or excavating earth.

[AAC R18-2-604(A)]

b. Apply temporary paving, dust suppressants, wetting down, or detouring when using, repairing, constructing or reconstructing a roadway.

[AAC R18-2-605(A)]

c. Apply dust suppressants, wetting, or cover the load when transporting materials likely to give rise to airborne dust.

[AAC R18-2-605(B)]

d. Use spray bars, wetting, wetting agents, dust suppressants, covers, or hoods when crushing, screening, handling, transporting, or conveying material that is likely to result in significant amounts of airborne dust. Bucket Elevator 432 shall be fully enclosed with no gaps or openings to allow the emissions of particulate matter. Belt Conveyor 483 shall be covered. Belt conveyor transfer points onto and from Belt Conveyor 483 shall be fully covered or enclosed.

[AAC R18-2-606, Installation Permit 1222]

e. Use chemical stabilization, wetting, or covering when stacking, piling or otherwise storing organic or inorganic dust-producing material.

[AAC R18-2-607(A)]

f. Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents.

[AAC R18-2-607(B)]

g. Use wetting agents or dust suppressants before the cleaning of any site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

[AAC R18-2-804(B)]

3. In addition to the requirements in Paragraph I(A)(3) of this Attachment, Permittee shall comply with the following conditions from the PM_{10} STATE IMPLEMENTATION PLAN FOR THE PAUL SPUR GROUP I AREA, *dated July 1990, prepared by the Office of Air Quality, Arizona Department of Environmental Quality* :

a. Permittee shall enclose all conveyor belt transfer points, or alternatively,

enclose and control by using an exhaust control system and dust collector, or use dust suppression chemicals.

[PSSIP 6.1]

b. Permittee shall ensure that all stacking and reclaiming machinery be either adjustable in order to provide minimum fall on storage piles, or have sleeves.

[PSSIP 6.3]

c. Permittee shall at all times operate and maintain a sufficient number of water trucks for the reduction of emissions of particulate matter for the areas indicated in Figure 1 of Attachment E. The water trucks shall be operated in such a manner as to allow all areas indicated in Figure 1 of Attachment E to be adequately wetted to the extent that an additional 60 percent control of PM_{10} emissions can be demonstrated by conductivity or silt testing.

[PSSIP 6.6(a)]

d. Permittee shall post speed limit signs to limit travel speed to less than 20 miles per hour.

[PSSIP 6.6(c)]

e. Permittee shall utilize chemical dust stabilizers to increase control of road emissions. The chemical stabilization of plant roads will be accomplished by the application of stabilizers at least three times annually to those areas shown on Attachment E at an application rate of 0.15 gallons per square yard of Magnesium Chloride solution or equivalent. The Magnesium Chloride solution shall be at least 25 percent Magnesium Chloride. Between periods of the aforementioned major applications, maintenance applications of lesser strength shall be used to sustain the control of emissions. Permittee shall maintain records to document the purchase and use of chemical stabilizers on plant roads.

[PSSIP 6.6(c), PSSIP 6.7]

f. Permittee shall maintain a program to minimize particulate emissions from piles of process waste material and dust by removal of the piles, capping, revegetation, or chemical stabilization.

[PSSIP 6.6(d)]

g. Permittee shall implement the housekeeping plan described in Attachment D.

[PSSIP 6.6(e)]

B. Monitoring, Reporting, Recordkeeping

1. Permittee shall conduct a Visible Emissions Observation Procedure, as defined in

Part I(D), once every two weeks to monitor emissions from all activities covered by this Section.

[AAC R18-2-306(A)(3)(c)]

2. Permittee shall maintain records of the dates on which any of the activities listed in Sub-Paragraphs III(A)(2)(a) through (g) of this Attachment were performed and control measures employed.

[AAC R18-2-306(A)(3)(c)]

3. In lieu of Paragraph III(B)(2), Permittee may maintain a Non-Point Source Monitoring Plan as a means of monitoring and recordkeeping for any of the activities listed in Sub-Paragraphs III(A)(2)(a) through (g) of this Attachment. The Non-Point Source Monitoring Plan shall be developed and maintained in compliance with the following conditions :

   a. If the Non-Point Source Monitoring Plan has not been submitted to the Director as part of the Class I application form, Permittee shall submit a significant revision pursuant to AAC R18-2-320 stating an intent to rely on a Non-Point Source Monitoring Plan. The Non-Point Source Monitoring Plan shall be submitted with the Significant Revision application.

   b. The Non-Point Source Monitoring Plan shall describe the methods that Permittee will use to comply with the requirements of this Section. The plan shall contain the following minimum elements of information :

      (1) Types of control measures employed on an activity-specific basis;
      (2) Frequency of application of control measure; and
      (3) A system for documenting variations from the strategy outlined in the Non-Point Source Monitoring Plan.

   c. Permittee may add any of the methods already listed in Sub-Paragraphs III(A)(2)(a) through (g) to the list of control methods initially identified in the Non-Point Source Monitoring Plan. Such changes shall be recorded, and a notification shall be sent to the Director within 10 days following the change. In addition, Permittee may add any method approved by the Director following permit issuance pursuant to Paragraph III(A)(2), to the list of control methods identified in the Non-Point Source Monitoring Plan.

[AAC R18-2-306(A)(3)(c)]

C. Permit Shield

Compliance with the terms of Section III of this Attachment shall be deemed compliance

with AAC R18-2-604(A), AAC R18-2-605(A), AAC R18-2-605(B), AAC R18-2-606, AAC R18-2-607(A), AAC R18-2-607(B), AAC R18-2-804(B), PSSIP 6.1, PSSIP 6.3, PSSIP 6.6(a), PSSIP 6.6(b), PSSIP 6.6(c), PSSIP 6.6(d), PSSIP 6.6(e), and PSSIP 6.7 for the non-point sources identified in the respective permit conditions in this Section.

[AAC R18-2-325]

IV. Solid Fuel Handling System

This Section is applicable to equipment that is part of the Solid Fuel Handling System.

A. #4 Fuel Bin, #4 Solid Fuel Mill

1. Emission Limits/Standards

a. The opacity of any plume or effluent from the #4 Fuel Bin and #4 Solid Fuel Mill operations shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from the equipment covered by this section, particulate matter in excess of the amounts calculated by one of the following equations :

(1) $E = 4.10\ P^{0.67}$ when P is less than or equal to 30 tons per hour

(2) $E = 55.0\ P^{0.11} - 40$ when P is greater than 30 tons per hour

where :

"E" is the maximum allowable particulate emissions in pounds-mass per hour
"P" is the process weight rate in tons-mass per hour.

[AAC R18-2-716(B)]

2. Air Pollution Control

At all times that the #4 Fuel Bin and #4 Solid Fuel Mill operations are in progress, Permittee shall operate the controls illustrated in Figure 3 of Attachment E, to minimize particulate emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[AAC R18-2-306(A)(2)]

3. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Part I(D) of this Attachment, once every two weeks to monitor emissions from the #4 Fuel Bin and #4 Solid Fuel Mill operations.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part IV(A) of this Attachment shall be deemed compliance with AAC R18-2-702(B) and AAC R18-2-716(B) for the #4 Fuel Bin and #4 Solid Fuel Mill operations.

[AAC R18-2-325]

B. Railcar Unloading, Hoppers, Feeders, Crusher, Conveyors, #5 Fuel Bin, #5 Solid Fuel Mill

1. Emission Limits/Standards

Permittee shall not cause to be discharged into the atmosphere from any Railcar Unloading, Hopper, Feeder, Conveyor, Crusher, # 5 Fuel Bin, or #5 Solid Fuel Mill, gases which exhibit 20 percent opacity or greater. EPA Reference Method 9 in 40 CFR 60, Appendix A shall be used to determine opacity. Emissions in excess of 20 percent opacity during periods of startup, shutdown, and malfunction shall not be considered a violation of the limit. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(f).

[40 CFR § 60.252(c), § 60.254(b)(2), § 60.8(c)]

2. Air Pollution Control

a. At all times that the Railcar Unloading, Hoppers, Feeders, Conveyors, Crusher, #5 Fuel Bin, or #5 Solid Fuel Mill are in operation, including periods of startup, shutdown, and malfunction, Permittee shall operate the controls illustrated in Figure 3 of Attachment E, to minimize particulate emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[40 CFR § 60.11(d), AAC R18-2-306(A)(2)]

b. All conveyor belt transfer points shall either be enclosed to the maximum extent possible or, in the alternative, be enclosed and controlled by using an exhaust system and dust collector, or by use of dust suppressant chemicals applied with sprays as approved by the Director so as to prevent particulate matter from becoming airborne. This condition is designated as a material

permit condition in accordance with AAC R18-2-331(A)(3)(e).

[PSSIP Condition 6.1]

3. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from Railcar Unloading, Hoppers, Feeders, Conveyors, Crusher, #5 Fuel Bin, and #5 Solid Fuel Mill.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part IV(B) of this Attachment shall be deemed compliance with 40 CFR § 60.252(c) for Railcar Unloading, Hoppers, Feeders, Conveyors, Crusher, #5 Fuel Bin, #5 Solid Fuel Mill.

[AAC R18-2-325]

V. Kiln 4 System

This Section is applicable to equipment that is part of the Kiln 4 System.

A. Kiln 4 Preheater Screen

1. Emission Limits/Standards

The opacity of any plume or effluent from the Kiln 4 Preheater Screen shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

2. Air Pollution Control

Permittee shall operate Kiln 4 Preheater Screen with an enclosure to minimize particulate emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[PSSIP 6.4]

3. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Part I(D) of this Attachment, once every two weeks to monitor emissions from the

Kiln 4 Preheater Screen.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part V(A) of this Attachment shall be deemed compliance with AAC R18-2-702(B) for the Kiln 4 Preheater Screen.

[AAC R18-2-325]

B. Kiln 4

1. Emission Limits/Standards

a. The opacity of any plume or effluent from the Kiln 4 stack shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from Kiln 4 and Kiln 5 stacks combined, particulate matter in excess of the amounts calculated by one of the following equations :

(1) $E = 4.10\ P^{0.67}$ when P is less than or equal to 30 tons per hour

(2) $E = 55.0\ P^{0.11} - 40$ when P is greater than 30 tons per hour

where :

"E" is the maximum allowable particulate emissions in pounds-mass per hour from Kiln 4 and Kiln 5 stacks combined, and

"P" is the process weight rate in tons-mass per hour. For the purposes of this permit Kiln 4 and Kiln 5 shall be treated as similar units employing a similar type process. The combined process weight rate through Kiln 4 and Kiln 5 shall be used to calculate the maximum allowable particulate emissions from Kiln 4 and Kiln 5 stacks combined.

[AAC R18-2-720(B)(1), AAC R18-2-720(D)]

c. Permittee shall maintain damper seals for Kiln 4 in such a manner that fugitive emissions do not have opacity in excess of five percent as measured by EPA Reference Method 9.

[Permit 0368-93, Attachment A, X(A)(1)]

2. Air Pollution Control

   a. At all times that Kiln 4 is operated, Permittee shall operate the Cyclone and the Gravel Bed Filter DC 400. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

   [AAC R18-2-306(A)(2)]

   b. Permittee shall continue to maintain and operate the Kiln 4 Dust Collector dust transfer and storage system including all screw conveyors, dust pods, and bucket elevators to minimize particulate emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

   [PSSIP 6.5]

   c. Permittee shall maintain and operate a system to provide a written record of the initial time and duration of all bypasses of Gravel Bed Filter DC 400.

   [Permit 0368-93 Attachment A, X(A)(2)]

3. Monitoring, Reporting, Recordkeeping

   a. Permittee shall continue to calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged from Kiln 4. The span of this system shall be set at 70% opacity.

   [AAC R18-2-720(F)]

   b. In lieu of Sub-Paragraph V(B)(3)(a), Permittee may operate the monitoring system in accordance with a Continuous Opacity Monitoring System Quality Assurance Program approved by the Director. Within 10 days of approval by the Director, Permittee shall provide a copy of the Continuous Opacity Monitoring System Quality Assurance Program to the Administrator. Subsequent changes to the Continuous Opacity Monitoring System Quality Assurance Program shall be made only with the prior approval of the Director. The Administrator shall be notified of such changes within 10 days of the change.

   [AAC R18-2-306(A)(3)(c)]

   c. Permittee shall comply with all applicable requirements for monitoring systems outlined in Appendix 9 of Arizona Administrative Code Title 18, Chapter 2, for the continuous monitoring system operated pursuant to Sub-Paragraph V(B)(3)(a) of this Attachment.

   [AAC R18-2-Appendix 9]

   d. Permittee shall monitor particulate matter emissions from Kiln 4 in the

following manner :

(1) Permittee shall evaluate opacity measurements from the continuous opacity monitoring system on a 3-hr rolling average. If the 3-hr rolling average opacity exceeds 20 percent, Permittee shall initiate investigation of the control equipment within 24 hours of the first exceedance for possible corrective action. If corrective action is required, Permittee shall proceed to implement such corrective action as soon as practicable in order to minimize possible exceedances of the particulate standard established in Sub-Paragraph V(B)(1)(b) of this Attachment. If the 3-hr rolling average opacity remains above 20 percent for consecutive 72 hours after the first exceedance, Permittee shall submit a compliance schedule to the Department in accordance with Part XII(D) of the Attachment "A".

(2) Permittee shall log in ink or in electronic format and maintain a record of 3-hr opacity measurements performed in accordance with Condition V(B)(3)(c)((1)) above and any corrective actions taken. A record of corrective actions taken shall include the date and time that the 3-hr rolling average opacity exceeded 20 percent and the date and time corrective action, if any, was completed.

[AAC R18-2-306(A)(3)(c)]

e. Permittee shall maintain daily records of the amount of dust generated and disposed from Kiln 4.

[Installation Permit 1233, Attachment B, IV(1)]

f. Permittee shall submit semiannual reports containing the following information along with the compliance certification required by Section VII of Attachment A :

(1) For each month, the number of days in which Kiln 4 produced lime.
(2) For each month, the quantity of lime (in tons) produced by Kiln 4.

[Permit 0368-93 Attachment A, IX(A)(2)]

g. Permittee shall submit reports in accordance with Paragraph I(B)(2) of this Attachment.

[Permit 0368-93 Attachment, A, IX(B)]

4. Fuel Limitation

a. Permitteee shall use only the following materials as fuel: (i) natural gas, (ii) fuel oil, (iii) coal, (iv) petroleum coke, or (v) combination of (i) through (iv).

[AAC R18-2-306(A)(2)]

b. Permittee shall record the type and amount of fuel used on a daily basis. Permittee shall provide a semiannual report of this record as required in Paragraph I(B)(1) of this Attachment.

[AAC R18-2-306(A)(3)(c)]

5. Testing

a. Except as provided in Sub-Paragraph V(B)(5)(c), Permittee shall conduct an annual performance test to measure the opacity of emissions from Kiln 4 stack. The test shall be performed in accordance with EPA Reference Method 9 in 40 CFR 60, Appendix A. Except as provided in Sub-Paragraph V(B)(5)(d), Permittee shall conduct the performance test while firing solid fuel in Kiln 4.

[AAC R18-2-306(A)(3)(c)]

b. Except as provided in Sub-Paragraph V(B)(5)(c), Permittee shall conduct an annual performance test to measure the particulate matter emissions from Kiln 4 stack. The test shall be performed in accordance with EPA Reference Method 5 in 40 CFR 60, Appendix A. Except as provided in Sub-Paragraph V(B)(5)(d), Permittee shall conduct the performance test while firing solid fuel in Kiln 4. The results of the test shall be combined with the results of the performance test conducted pursuant to Sub-Paragraph VI(B)(5)(b), and compared with the emission standard in Sub-Paragraph V(B)(1)(b).

[AAC R18-2-306(A)(3)(c)]

c. Permittee is exempted from performing the tests listed in Sub-Paragraphs V(B)(5)(a) and V(B)(5)(b) if Kiln 4 is operated for less than : (i) 30 days per year continuous operation, and (ii) 60 days per year cumulative operation.

[AAC R18-2-306(A)(3)(c)]

d. If solid fuel is not the typical fuel being used in Kiln 4, Permittee may use the typical fuel while conducting the performance tests. For the purposes of this Sub-Paragraph, a fuel shall be deemed to be the typical fuel if it is used for greater than : (i) 30 days per year continuous operation, or (ii) 60 days per year cumulative operation.

[AAC R18-2-306(A)(3)(c)]

6. Permit Shield

Compliance with the terms of Part V(B) of this Attachment shall be deemed compliance with AAC R18-2-702(B), AAC R18-2-720(D), AAC R18-2-720(F), and

Installation Permit 1233 Attachment B, Condition IV(1) for Kiln 4.

[AAC R18-2-325]

C. Kiln 4 Pug Mill

1. Emission Limits/Standards

The opacity of any plume or effluent from the Kiln 4 Pug Mill shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

2. Air Pollution Control

Kiln 4 Pug Mill shall at all times be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[Installation Permit 1233 Attachment A, III; Attachment B Condition III(A)]

3. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from Kiln 4 Pug Mill.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part V(C) of this Attachment shall be deemed compliance with AAC R18-2-702(B) for Kiln 4 Pug Mill.

[AAC R18-2-325]

D. BC 403/DC 403, Dust Bin BN-01 & Bucket Elevator BE-01/DC 426

1. Emission Limits/Standards

a. The opacity of any plume or effluent from the DC 403 stack shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

b. Permittee shall not cause, allow, or permit the discharge into the atmosphere

in any one hour, from the DC 403 stack, particulate matter in excess of the amounts calculated by the following equation :

$E = 4.10\ P^{0.67}$

where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

[AAC R18-2-730(A)(1)(a)]

c. Permittee shall not cause to be discharged into the atmosphere from Dust Bin BN-01 and Bucket Elevator BE-01 any fugitive emissions which exhibit opacity greater that 10%.

[Installation Permit 1233, Attachment B, II(B)(2)]

2. Air Pollution Control

At all times that BC 403 is operated, Permittee shall operate DC 403. At all times that Dust Bin BN-01 and Bucket Elevator BE-01 are operated, Permittee shall operate DC 426. DC 426 shall at all times be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions. This is a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[AAC R18-2-306(A)(2), Installation Permit 1233, Attachment A, III; Attachment B, III(B)]

3. Monitoring, Reporting, Recordkeeping

a. Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from DC 403 and DC 426. [AAC R18-2-306(A)(3)(c)]

b. Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Part I(C), once every month to monitor emissions from DC 403 and DC 426.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part V(D) of this Attachment shall be deemed compliance with AAC R18-2-702(B) and AAC R18-2-730(A)(1)(a) for BC 403/DC 403, Dust Bin BN-01 and Bucket Elevator BE-01, and with Installation Permit 1233, Attachment B, II(B)(2) for Dust Bin BN-01 and Bucket Elevator BE-01

[AAC R18-2-325]

VI. Kiln 5 System

A. Kiln 5 Scalping Screen

1. Emission Limits/Standards

Permittee shall not cause to be discharged into the atmosphere, from the Kiln 5 Scalping Screen, any fugitive emissions which exhibit opacity greater than 10 percent. For the purposes of this sub-paragraph, "fugitive emissions" shall have the meaning provided in 40 CFR §60.671 (Fugitive Emissions). EPA Reference Method 9 in 40 CFR 60, Appendix A shall be used to determine opacity. Emissions in excess of 10 percent opacity during periods of startup, shutdown, and malfunction shall not be considered a violation of the limit. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(f).

[40 CFR § 60.672(b), § 60.675(b)(2), § 60.8(c)]

2. Air Pollution Control

At all times that the Kiln 5 Scalping Screen is in operation, including periods of startup, shutdown, and malfunction, Permittee shall operate it with an enclosure in a manner consistent with good air pollution control practice to minimize particulate emissions from the screen. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[40 CFR § 60.11(d), PSSIP 6.4]

3. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from the Kiln 5 Scalping Screen.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part VI(A) of this Attachment shall be deemed compliance with 40 CFR § 60.672(c) for the Kiln 5 Scalping Screen.

[AAC R18-2-325]

B. Kiln 5

1. Emission Limits/Standards

a. The opacity of any plume or effluent from the Kiln 5 stack shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from Kiln 4 and Kiln 5 stacks, particulate matter in excess of the amounts calculated by the one of the following equations :

(1) $E = 4.10\ P^{0.67}$ when P is less than or equal to 30 tons per hour

(2) $E = 55.0\ P^{0.11} - 40$ when P is greater than 30 tons per hour

where :

"E" is the maximum allowable particulate emissions in pounds-mass per hour from Kiln 4 and Kiln 5 stacks combined, and

"P" is the process weight rate in tons-mass per hour. For the purposes of this permit Kiln 4 and Kiln 5 shall be treated as similar units employing a similar type process. The combined process weight rate through Kiln 4 and Kiln 5 shall be used to calculate the maximum allowable particulate emissions from Kiln 4 and Kiln 5 stacks combined.

[AAC R18-2-720(B)(1), AAC R18-2-720(D)]

2. Air Pollution Control

a. At all times that Kiln 5 is operated, Permittee shall operate baghouse DC 500. This is a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[Installation Permit 1201]

b. Permittee shall continue to maintain and operate the Kiln 5 Dust Collector dust transfer and storage system including all screw conveyors and bucket elevators to minimize particulate emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[PSSIP 6.5]

3. Monitoring, Reporting, Recordkeeping

a. Permittee shall continue to calibrate, maintain, and operate a continuous

monitoring system to monitor and record the opacity of the gases discharged from Kiln 5. The span of this system shall be set at 70% opacity.

[AAC R18-2-720(F)]

b. In lieu of Sub-Paragraph VI(B)(3)(a), Permittee may operate the monitoring system in accordance with a Continuous Opacity Monitoring System Quality Assurance Program approved by the Director. Within 10 days of approval by the Director, Permittee shall provide a copy of the Continuous Opacity Monitoring System Quality Assurance Program to the Administrator. Subsequent changes to the Continuous Opacity Monitoring System Quality Assurance Program shall be made only with the prior approval of the Director. The Administrator shall be notified of such changes within 10 days of the change.

[AAC R18-2-306(A)(3)(c)]

c. Permittee shall comply with all requirements for monitoring systems outlined in Appendix 9 of Arizona Administrative Code, Title 18, Chapter 9, for the continuous monitoring system installed pursuant to Sub-Paragraph VI(B)(3)(a).

[AAC R18-2-Appendix 9]

d. Permittee shall monitor particulate emissions from Kiln 5 in the following manner :

(1) Permittee shall evaluate opacity measurements from the continuous opacity monitoring system on a 3-hr rolling average. If the 3-hr rolling average opacity exceeds 10 percent, Permittee shall initiate investigation of the control equipment within 24 hours of the first exceedance for possible corrective action. If corrective action is required, Permittee shall proceed to implement such corrective action as soon as practicable in order to minimize possible exceedances of the particulate standard established in Sub-Paragraph VI(B)(1)(b) of this Attachment. If the 3-hr rolling average opacity remains above 10 percent for consecutive 72 hours after the first exceedance, Permittee shall submit a compliance schedule to the Department in accordance with Part XII(D) of the Attachment "A".

(2) Permittee shall log in ink or in electronic format and maintain a record of 3-hr opacity measurements performed in accordance with Condition VI(B)(3)(d)((1)) above and any corrective actions taken. A record of corrective actions taken shall include the date and time that the 3-hr rolling average opacity exceeded 10 percent and the date and time corrective action, if any, was completed.

[AAC R18-2-306(A)(3)(c)]

e. Permittee shall maintain daily records of the amount of dust generated and disposed from Kiln 5.

[Installation Permit 1233, Attachment B, IV(1)]

f. Permittee shall submit semiannual reports containing the following information along with the compliance certification required by Section VII of Attachment A

(1) For each month, the number of days in which Kiln 5 produced lime.
(2) For each month, the quantity of lime (in tons) produced by Kiln 5.

[Permit 0368-93 Attachment A, IX(A)(2)]

g. Permittee shall submit reports in accordance with Paragraph I(B)(2) of this Attachment.

[Permit 0368-93 Attachment, A, IX(B)]

4. Fuel Limitation

a. Permittee shall use only the following materials as fuel for Kiln 5 : (i) natural gas, (ii) coal, (iii) petroleum coke, (iv) fuel oil, (v) on-specification used oil at a rate less than or equal to 20 gallons per hour, or (vi) any combination of (i) through (v).

[AAC R18-2-306(A)(2)]

b. Permittee shall only use on-specification used oil with contamination concentrations below the following levels : (i) Arsenic - 5 parts per million, (ii) Cadmium - 2 parts per million, (iii) Chromium - 10 parts per million, (iv) Lead - 100 parts per million, (v) PCB's - 2 parts per million, and (vi) Total Halogens - 1000 parts per million. Permittee shall maintain on record, copies of the fuel analyses for each batch of used oil, and shall ensure that the analysis conforms to the contamination levels specified above.

[ARS 49-801(2)]

c. Permittee shall record the type and amount of fuel used on a daily basis. Permittee shall provide a semiannual report of this record as required in Paragraph I(B)(1) of this Attachment.

[AAC R18-2-306(A)(3)(c)]

5. Testing

a. Except as provided in Sub-Paragraph VI(B)(5)(c), Permittee shall conduct an

annual performance test to measure the opacity of emissions from Kiln 5 stack. The test shall be performed in accordance with EPA Reference Method 9 in 40 CFR 60, Appendix A. Except as provided in Sub-Paragraph VI(B)(5)(d), Permittee shall conduct the performance test while firing solid fuel in Kiln 5.

[AAC R18-2-306(A)(3)(c)]

b. Except as provided in Sub-Paragraph VI(B)(5)(c), Permittee shall conduct an annual performance test to measure the particulate matter emissions from Kiln 5 stack. The test shall be performed in accordance with EPA Reference Method 5 in 40 CFR 60, Appendix A. Except as provided in Sub-Paragraph VI(B)(5)(d), Permittee shall conduct the performance test while firing solid fuel in Kiln 5. The results of the test shall be combined with the results of the performance test conducted pursuant to Sub-Paragraph V(B)(5)(b), and compared with the emission standard in Sub-Paragraph VI(B)(1)(b).

[AAC R18-2-306(A)(3)(c)]

c. Permittee is exempted from performing the tests listed in Sub-Paragraphs VI(B)(5)(a) and VI(B)(5)(b) if Kiln 5 is operated for less than : (i) 30 days per year continuous operation, and (ii) 60 days per year cumulative operation.

[AAC R18-2-306(A)(3)(c)]

d. If solid fuel is not the typical fuel being used in Kiln 5, Permittee may use the typical fuel while conducting the performance tests. For the purposes of this Sub-Paragraph, a fuel shall be deemed to be the typical fuel if it is used for greater than : (i) 30 days per year continuous operation, or (ii) 60 days per year cumulative operation.

[AAC R18-2-306(A)(3)(c)]

6. Permit Shield

Compliance with the terms of Part VI(B) of this Attachment shall be deemed compliance with AAC R18-2-702(B), AAC R18-2-720(D), AAC R18-2-720(F), and Installation Permit 1233 Attachment B, Condition IV(1) for Kiln 5.

[AAC R18-2-325]

C. Kiln 5 Product Cooler

1. Emission Limits/Standards

The opacity of any plume or effluent from the Kiln 5 Product Cooler shall not

exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

2. Air Pollution Control

Permittee shall operate the controls illustrated in Figure 5 of Attachment E, to minimize visible emissions from the Kiln 5 Product Cooler. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[AAC R18-2-306(A)(2)]

3. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from Kiln 5 Product Cooler.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part VI(C) of this Attachment shall be deemed compliance with AAC R18-2-702(B) for Kiln 5 Product Cooler.

[AAC R18-2-325]

D. Reject Belt/DC522, BC 404/DC523, Kiln 5 Dust Bin/DC 524, T-410 Bin/DC 508

1. Emission Limits/Standards

a. The opacity of any plume or effluent from the Reject Belt, BC 404, Kiln 5 Dust Bin, and T-410 Bin shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from the Reject Belt, BC 404, Kiln 5 Dust Bin, and T-410 Bin, particulate matter in excess of the amounts calculated by the following equation:

$E = 4.10\ P^{0.67}$

where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

[AAC R18-2-730(A)(1)(a)]

2. Air Pollution Control

At all times that Reject Belt, BC 404, Kiln 5 Dust Bin, and T-410 Bin are operated, Permittee shall operate DC 522, DC 523, DC 524, and DC 508. This is a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[AAC R18-2-306(A)(2), Permit 1001154]

3. Monitoring, Reporting, Recordkeeping

a. Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from DC 522, DC 523, DC 524, and DC 508.

[AAC R18-2-306(A)(3)(c)]

b. Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Part I(C), once every month to monitor emissions from DC 522, DC 523, DC 524, and DC 508.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part VI(D) of this Attachment shall be deemed compliance with AAC R18-2-702(B) and AAC R18-2-730(A)(1)(a) for the Reject Belt, BC 404, Kiln 5 Dust Bin, and T-410 Bin.

[AAC R18-2-325]

E. Kiln 5 Pug Mill

1. Emission Limits/Standards

The opacity of any plume or effluent from the Kiln 5 Pug Mill shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

2. Air Pollution Control

Kiln 5 Pug Mill shall at all times be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[Installation Permit 1233 Attachment A, III; Attachment B III(A)]

3. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from Kiln 5 Pug Mill.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part VI(E) of this Attachment shall be deemed compliance with AAC R18-2-702(B) for the Kiln 5 Pug Mill.

[AAC R18-2-325]

VII. Kilns 4 and 5 Lime Handling System

A. Roll Crusher R-405/DC 402, Bin 401/DC401, Bin 402 & Screw 434/DC402, Bin 403 & Bin 405/DC406, BC 483/DC482, Spout 483/DC483, BC 486/DC486, Spout 486/DC487, BC 433/DC431

1. Emission Limits/Standards

a. The opacity of any plume or effluent from each of the emission units covered by Part VII(A) shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from each of the emission units covered by Part VII(A), particulate matter in excess of the amounts calculated by one of the following equations :

(1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation :

$$E = 4.10\ P^{0.67}$$

where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

(2) For process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation :

$$E = 55.0\ P^{0.11} - 40$$

where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

[AAC R18-2-730(A)(1)]

c. For the purposes of Sub-Paragraph VII(A)(1)(c), the total process weight rate from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[AAC R18-2-730(B)]

2. Air Pollution Control

a. Except as provided in Sub-Paragraph VII(A)(2)(d), Permittee shall operate dust collectors DC 401, DC 402, DC 406, DC 431, DC 482, DC 483, DC 486, DC 487, at all times when the respective emission units they control are in operation. All dust collectors shall at all times be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[Permit 1001605, Permit 1000376]

b. Except as provided in Sub-Paragraph VII(A)(2)(d), Permittee shall operate DC 406 to control emissions from Bin 403. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[Installation Permit 1222]

c. Except as provided in Sub-Paragraph VII(A)(2)(d), Permittee shall operate DC 483 to control emissions from Spout 483. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[Installation Permit 1222]

d. Permittee may temporarily shutdown, for repair purposes, a baghouse used to control particulate emissions from operating equipment provided the following conditions are met :

(1) Permittee continues to comply with the applicable emission standards in Paragraph VII(A)(1);

(2) Permittee shall :

(a) record the start time and date, anticipated downtime of the device, cause of the downtime, and proposed corrective action. If the anticipated downtime is in excess of two days, Permittee shall report the anticipated downtime to ADEQ within 24 hours.

(b) if the downtime goes beyond the anticipated end of downtime, Permittee shall report to ADEQ within 24 hours;
(c) record the end times and dates of the repair procedure.

(3) Permittee keeps a record of the type of repair performed;

(4) For periods exceeding 12 hours, Permittee conducts the following actions :

(a) Once every 24-hour period commencing from the time of initial shutdown, an EPA Reference Method 9 observation of the equipment being controlled by the relevant baghouse;

(b) A record of the time, date, location, and results of the EPA Reference Method 9 observations;

(c) If any of the EPA Reference Method 9 observations results indicate an exceedance of the applicable opacity standard, Permittee reports the excess emissions in accordance with Section XII of Attachment A.

3. Monitoring, Reporting, Recordkeeping

a. Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from the emission units covered by this Part . [AAC R18-2-306(A)(3)(c)]

b. Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Part I(C), once every month to monitor emissions from the dust collectors DC 401, DC 402, DC 406, DC 431, DC 482, DC 483, DC 486, DC 487. [AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part VII(A) of this Attachment shall be deemed compliance with AAC R18-2-702(B) and AAC R18-2-730(A) for Roll Crusher R-405/DC 402, Bin 401/DC401, Bin 402 & Screw 434/DC402, Bin 403 & Bin 405/DC406, BC 483/DC482, Spout 483/DC483, BC 486/DC486, Spout 486/DC487, BC 433/DC431.

[AAC R18-2-325]

B. Roll Crusher R-451/Sealed Control, Hammermill R-452/Sealed Control, Bin

406/Enclosures&Seals, Drop Points into Trucks from Bins 401, 402, 403, 404, 405, 406, 407 - Use Loading Sleeves & Enclosures

1. Emission Limits/Standards

   The opacity of any plume or effluent from each of the emission units covered by Part VII(B) of this Attachment shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

   [AAC R18-2-702(B)]

2. Air Pollution Control

   The following conditions are designated as material permit conditions in accordance with AAC R18-2-331(A)(3)(e) :

   a. Permittee shall operate seals to control visible emissions from Roll Crusher R451.

   b. Permittee shall operate seals to control particulate emissions from Hammermill R452.

   c. Permittee shall operate either seals and enclosures to control particulate emissions from Bin 406.

   d. Permittee shall operate loading sleeves or enclosures to control particulate emissions from Drop Points into Trucks from Bins 401, 402, 403, 404, 405, 406, 407.

   [R18-2-306(A)(2)]

3. Monitoring, Reporting, Recordkeeping

   Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Part I(D), once every two weeks to monitor visible emissions from the emission units covered by this Part. [AAC R18-2-306(A)(3)(c)]

4. Permit Shield

   Compliance with the terms of Part VII(B) of this Attachment shall be deemed compliance with AAC R18-2-702(B) for Roll Crusher R-451, Hammermill R-452, Bin 406, Drop Points into Trucks from Bins 401, 402, 403, 404, 405, 406, 407, 409.

   [AAC R18-2-325]

VIII. Kiln 6 System

A. Kiln 6 Feed Screen and Kiln 6 Stone Bin/ Enclosures/DC774

1. Emission Limits/Standards

   a. The opacity of any plume or effluent from Kiln 6 Feed Screen, Kiln 6 Stone Bin, and DC 774 shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

   [AAC R18-2-702(B)]

   b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from Kiln 6 Feed Screen, Kiln 6 Stone Bin, and DC 774, particulate matter in excess of the amounts calculated by one of the following equations :

      (1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation :

      $E = 4.10\ P^{0.67}$

      where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

      (2) For process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation :

      $E = 55.0\ P^{0.11} - 40$

      where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

      [AAC R18-2-722(B)]

2. Air Pollution Control

   Permittee shall operate DC 774 to control emissions from Kiln 6 Feed Screen and Kiln 6 Stone Bin. Permittee shall enclose Kiln 6 Feed Screen. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

   [R18-2-306(A)(2), PSSIP 6.4]

3. Monitoring, Reporting, Recordkeeping

a. Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from Kiln 6 Feed Screen, Kiln 6 Stone Bin, and DC 774. [AAC R18-2-306(A)(3)(c)]

b. Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Part I(C), once every month to monitor emissions from DC 774.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms in Part VIII(A) of this Attachment shall be deemed compliance with AAC R18-2-702(B) and AAC R18-2-722(B) for Kiln 6 Feed Screen, Kiln 6 Stone Bin, and DC 774.

[AAC R18-2-325)]

B. Kiln 6

1. Emission Limits/Standards

a. The opacity of any plume or effluent from Kiln 6 shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from Kiln 6, particulate matter in excess of the amounts calculated by one of the following equations :

(1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation :

$$E = 4.10\ P^{0.67}$$

where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

(2) For process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation :

$$E = 55.0\ P^{0.11} - 40$$

where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

[AAC R18-2-720(B)]

c. For the purposes of Sub-Paragraph VIII(B)(1)(b) of this Attachment, the total process weight rate from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[AAC R18-2-720(D)]

d. Permittee shall not discharge or cause the discharge into the atmosphere particulate matter in excess of five (5) pounds per hour, maximum two (2) hour average from the Kiln 6 and wet scrubber DC 600 system.

[EPA Installation Permit issued August 31, 1978, Condition VIII(B)]

e. Permittee shall maintain damper seals for Kiln 6 in such a manner that fugitive emissions do not have opacity in excess of five percent as measured by EPA Reference Method 9.

[PSSIP 6.4, Permit 0368-93, Attachment A, X(A)(1)]

2. Air Pollution Control

a. Permittee shall operate wet scrubber DC 600 to control particulate emissions from Kiln 6. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[EPA Installation Permit issued August 31, 1978, ADEQ Installation Permit 1208]

b. All equipment, facilities, or systems installed or used to achieve compliance with Sub-Paragraph VIII(B)(1)(d) of this Attachment shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).

[EPA Installation Permit issued August 31, 1978]

c. Permittee shall maintain the Kiln 6 damper seals in an improved condition pursuant to PSSIP 6.4.

[PSSIP 6.4]

d. Permittee shall maintain and operate a system to provide a written record of the initial time and duration of all bypasses of DC 600.

[Permit 0368-93 Attachment A, X(A)(2)]

3. Monitoring, Reporting, Recordkeeping

Permittee shall monitor particulate emissions from the Kiln 6 and DC 600 system in the following manner :

a. Permittee shall operate sufficient devices in order to continuously measure the scrubber pressure drop and scrubber water flow rate, and to continuously display the measurements at the Kiln 6 control room. Permittee shall record the continuous data in ink or in an electronic format.

[Installation Permit 1208, AAC R18-2-306(A)(3)(c)]

b. Permittee shall calibrate the pressure drop and water flow rate monitoring devices at least on an annual basis. Permittee shall keep records of the date when such calibration was performed. Permittee shall also keep a record of the procedures used to calibrate the devices, and the results of the calibration.

[AAC R18-2-306(A)(3)(c)]

c. Permittee shall operate the wet scrubber DC 600 in such a manner as to assure that the water flow rate is greater than or equal to 90 gallons per minute measured as a one hour average. Permittee may re-establish this range of water flow based on : (i) adequate performance testing data as approved by the Director, and (ii) a Minor Permit Revision to this permit in accordance with AAC R18-2-319.

[AAC R18-2-306(A)(3)(c)]

d. If the water flow rate falls below the range established in Sub-Paragraph VIII(B)(3)(c), Permittee shall initiate corrective action as necessary to restore operation within the range. If Permittee is unable to restore operation within the range, procedures outlined in Sub-Paragraph VIII(B)(3)(e) shall be followed.

Permittee shall keep a record of the time and date of such an occurrence. Permittee shall record the value of both, the pressure drop and water flow rate on a continuous basis until operation within the range is restored. Permittee shall keep a record of any corrective action taken to restore operation within the range. Permittee shall provide the information required to be recorded in this permit condition to the Director in the semi-annual monitoring report required under Part I(B) of Attachment “B”.

[AAC R18-2-306(A)(3)(c)]

e. If the water flow rate falls below the range established in Sub-Paragraph VIII(B)(3)(c) for 72 consecutive hours, Permittee shall submit a compliance schedule to the Department in accordance with Part XII(D) of Attachment "A".
[AAC R18-2-306(A)(3)(c)]

f. Permittee shall submit semiannual reports containing the following information along with the compliance certification required by Section VII of Attachment A :

(1) For each month, the number of days in which Kiln 6 produced lime.
(2) For each month, the quantity of lime (in tons) produced by Kiln 6.
[Permit 0368-93, Attachment A, IX(A)(2)]

g. Permittee shall submit reports in accordance with Paragraph I(B)(2) of this Attachment.
[Permit 0368-93 Attachment, A, IX(B)]

4. Fuel Limitation

Permittee shall only fire natural gas or fuel oil as fuels in Kiln 6.
[EPA Installation Permit issued August 31, 1978]

5. Testing

a. Except as provided in Sub-Paragraph VIII(B)(5)(d), Permittee shall conduct an annual performance test to measure the opacity of emissions from Kiln 6 stack. The test shall be conducted in accordance with EPA Reference Method 9 in 40 CFR 60, Appendix A.
[AAC R18-2-306(A)(3)(c)]

b. Except as provided in Sub-Paragraph VIII(B)(5)(d), Permitteee shall conduct an annual performance test to measure the particulate matter emissions from Kiln 6 stack. The test shall be performed in accordance with EPA Reference Method 5 in 40 CFR 60, Appendix A.
[AAC R18-2-306(A)(3)(c)]

c. Permittee shall conduct performance tests for particulate matter as specified by the Environmental Protection Agency. Performance tests shall be conducted and reported in accordance with the test methods set forth in Parts 60.8 and 60.344 (test Methods and procedures) of the Standards of Performance for New

Stationary Sources (40 CFR 60) or alternative methods approved by the EPA. The EPA shall be notified at least 30 days in advance of such tests to allow an observer to be present.

[EPA Installation Permit issued August 31, 1978]

d. Permittee is exempted from performing the tests listed in Sub-Paragraphs VIII(B)(5)(a) and VIII(B)(5)(b) if Kiln 6 is operated for less than : (i) 30 days per year continuous operation, and (ii) 60 days per year cumulative operation.

[AAC R18-2-306(A)(3)(c)]

6. Permit Shield

Compliance with the terms of Part VIII(D) shall be deemed compliance with AAC R18-2-702(B), AAC R18-2-720(B), EPA Installation Permit (issued August 31, 1978) Condition VIII(B), and PSSIP 6.4 for Kiln 6.

[AAC R18-2-325]

C. Kiln 6 Lime Crusher, DC 776, DC 775, DC 776, Large Bin&Kiln 6 Lime Screen/DC 777, Truck Loadout/DC 778, Dust Blend System Rail Loadout/DC 779, Dust Blend System Truck Loadout/DC 780, Dust Blend Bin/DC 730

1. Emission Limits/Standards

a. The opacity of any plume or effluent from each of the emission units covered by Part VIII(C) shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[AAC R18-2-702(B)]

b. Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from each of the emission units covered by Part VIII(C), particulate matter in excess of the amounts calculated by one of the following equations :

(1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation :

$$E = 4.10\ P^{0.67}$$

where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

(2) For process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation :

$E = 55.0\ P^{0.11} - 40$

where E is the maximum allowable particulate emissions in pounds-mass per hour, and P is the process weight rate in tons-mass per hour.

[AAC R18-2-730(A)(1)]

c. For the purposes of Sub-Paragraph VIII(A)(1)(b), the total process weight rate from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[AAC R18-2-730(B)]

2. Air Pollution Control

The following conditions are designated as material permit conditions in accordance with AAC R18-2-331(A)(3)(e) :

a. Permittee shall operate DC 776 to control particulate emissions from Kiln 6 Lime Crusher.

b. Permittee shall operate DC 775 and DC 776 to control particulate emissions from Kiln 6 Discharge, the Reject Conveyor, and the Product Conveyor.

c. Permittee shall operate DC 777 to control particulate emissions from the Large Bin and Kiln 6 Lime Screen.

d. Permittee shall operate DC 778 to control particulate emissions from Truck Loadout activities.

e. Permittee shall operate DC 779 to control particulate emissions from Dust Blend System Rail Loadout activities.

f. Permittee shall operate DC 780 to control particulate emissions from Dust Blend System Truck Loadout activities.

g. Permittee shall operate DC 730 to control particulate emissions from the Dust Blend Bin.

[R18-2-306(A)(2)]

3. Monitoring, Reporting, Recordkeeping

a. Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from the emission units covered by this Part.. [AAC R18-2-306(A)(3)(c)]

b. Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Part I(C), once every month to monitor emissions from the dust collectors DC 775, DC 776, DC 777, DC 778, DC 779, DC 780, and DC 730.

[AAC R18-2-306(A)(3)(c)]

4. Permit Shield

Compliance with the terms of Part VIII(C) of this Attachment shall be deemed compliance with AAC R18-2-702(B) and AAC R18-2-730(A)(1) for Kiln 6 Lime Crusher, DC 776, DC 775, DC 776, Large Bin&Kiln 6 Lime Screen/DC 777, Truck Loadout/DC 778, Dust Blend System Rail Loadout/DC 779, Dust Blend System Truck Loadout/DC 780, and Dust Blend Bin/DC 730.

[AAC R18-2-325]

IX. Alternate Operating Scenarios

Pursuant to AAC R18-2-306(A)(11), this Section contains terms and conditions for reasonably anticipated alternate operating scenarios.

A. Alternate Operating Scenario 1 ((AOS-1)

1. Definition of AOS-1

Under AOS-1, Permittee will suspend quarry, crushing, and kiln operations. All process equipment not in operation will be maintained in good operating order which will require periodic, temporary operation to perform maintenance. This maintenance will involve mechanical operation of the equipment without any process material.

The lime handling systems for Kilns 4, 5, and 6 will be used as a transfer terminal under AOS-1. Process rates for the lime handling will be 400 tons per day and 50,000 tons per year. Lime will be received and shipped via 25 ton capacity trucks. All truck traffic will be on paved roads except for an unpaved 50 foot long section leading to the Kiln 6 lime storage silos. Other vehicular traffic will consist of security personnel patrolling the plant 8 to 12 times per day and maintenance

personnel occasionally traveling to various locations within the plant. The U.S. Border Patrol also will occasionally use plant roadways.

2. Process Equipment

Activities and equipment subject to Section III, Section VII, and Part VIII(C) will remain in operation during AOS-1. All other activities and equipment shall not be operated except for maintenance, as described in Paragraph IX(A)(1).

3. Emission Limits/Standards

All emission limits and standards stated in Attachment A, Attachment B - Sections I through VIII, and Attachment B - Section IX of this permit remain effective during AOS-1.

4. Monitoring, Reporting, and Recordkeeping

a. Permittee shall notify ADEQ 30 days in advance of a transition into AOS-1. The notification shall include an estimate of the anticipated duration of AOS-1.

b. Permittee shall record the dates and times of actual transition into AOS-1. Permittee shall make a list, and make a record, of all equipment whose operations have been suspended. Permittee shall provide a copy of these records to ADEQ within 7 days.

c. Permittee shall continue to implement the following monitoring activities during AOS-1 :

Part III(B), Paragraph VII(A)(3), Paragraph VII(B)(3), Paragraph VIII(C)(3)

d. The monitoring requirements under Part III(B), and the Housekeeping Plan in Attachment D shall be implemented only over the areas that remain in active operation during AOS-1.

e. Permittee may suspend the following monitoring activities for the duration of AOS-1 :

Paragraph II(A)(3), Part IV(C), Paragraph V(A)(3), Paragraph V(B)(3), Paragraph V(C)(3), Paragraph V(D)(3), Paragraph VI(A)(3), Paragraph

VI(B)(3), Paragraph VI(C)(3), Paragraph VI(D)(3), Paragraph VI(E)(3), Paragraph VII(A)(3), Paragraph VIII(B)(3), Part IX(C).

f. Permittee shall provide a 30-day advance notice to ADEQ before reactivating any process that has been shut down during AOS-1.

g. Permittee shall ensure that all COMs and other monitoring gauges are re-calibrated and re-certified before reactivation of process equipment. Re-certification shall be conducted in accordance with a protocol pre-approved by the Director. Permittee shall notify ADEQ of monitor re-certification 14 days in advance, and maintain on record all documents pertaining to re-certification.

h. Permittee shall record the dates and times that equipment are reactivated. Permittee shall provide a notification to ADEQ within 7 days of reactivation.

i. The notifications required in Sub-Paragraphs IX(A)(4)(a), IX(A)(4)(b), IX(A)(4)(f), IX(A)(4)(g), and IX(A)(4)(h) shall be accompanied by a Certification of Truth, Accuracy, and Completeness. The notifications and certifications shall be signed by the Responsible Official.

B. Alternate Operating Scenario 2 (AOS-2)

1. Definition of AOS-2

Under AOS-2, all daily operations at the quarry and lime plant will be in "Care and Maintenance" mode. During this operating scenario, all equipment will be maintained in good operating order which will require periodic, temporary operation to perform maintenance. This maintenance will involve mechanical operation of the equipment, but without any process material.

Mobile traffic will consist of security personnel patrolling the plant site 8 to 12 times per day and maintenance personnel occasionally traveling to various locations within the plant. The U.S. Border Patrol also will occasionally use plant roadways.

2. Process Equipment

All process activities shall cease and equipment shall not be operated except for maintenance, as described in Paragraph IX(B)(1).

3. Emission Limits/Standards

All emission limits and standards stated in Attachment A, Attachment B - Sections

I through VIII, and Attachment B - Section IX of this permit remain effective during AOS-2.

4. Monitoring, Reporting, and Recordkeeping

   a. Permittee shall notify ADEQ 30 days in advance of a transition into AOS-2. The notification shall include an estimate of the anticipated duration of AOS-2.

   b. Permittee shall record the dates and times of actual transition into AOS-2. Permittee shall make a list, and make a record, of all equipment whose operations have been suspended. Permittee shall provide a copy of these records to ADEQ within 7 days.

   c. Permittee may suspend the following monitoring activities for the duration of AOS-2 :

      Part III(B), Paragraph VII(A)(3), Paragraph VII(B)(3), Paragraph VIII(C)(3), Paragraph II(A)(3), Part IV(C), Paragraph V(A)(3), Paragraph V(B)(3), Paragraph V(C)(3), Paragraph V(D)(3), Paragraph VI(A)(3), Paragraph VI(B)(3), Paragraph VI(C)(3), Paragraph VI(D)(3), Paragraph VI(E)(3), Paragraph VII(A)(3), Paragraph VIII(B)(3), Part IX(C).

   d. Permittee shall provide a 30-day advance notice to ADEQ before reactivating any process that has been shut down during AOS-2.

   e. Permittee shall ensure that all COMs and other monitoring gauges are re-calibrated and re-certified before reactivation of process equipment. Re-certification shall be conducted in accordance with a protocol pre-approved by the Director. Permittee shall notify ADEQ of monitor re-certification 14 days in advance, and maintain on record all documents pertaining to re-certification.

   f. Permittee shall record the dates and times that equipment are reactivated. Permittee shall provide a notification to ADEQ within 7 days of reactivation.

   g. The notifications required in Sub-Paragraphs IX(B)(4)(a), IX(B)(4)(b), IX(B)(4)(d), IX(B)(4)(e), and IX(B)(4)(f) shall be accompanied by a Certification of Truth, Accuracy, and Completeness. The notifications and certifications shall be signed by the Responsible Official.

C. Alternate Operating Scenario 3 (AOS-3)

1. Definition of AOS-3

AOS-3 entails the startup and operation of one or more process areas. For any given process area that is brought into operation, all initial monitoring and recordkeeping as originally required under normal operations will be followed to demonstrate compliance with the applicable requirements for each process area.

2. Emission Limits/Standards

   All emission limits and standards stated in Attachment A, Attachment B - Sections I through VIII, and Attachment B - Section IX of this permit remain effective during AOS-3.

3. Monitoring, Reporting, and Recordkeeping

   a. Permittee shall notify ADEQ 30 days in advance of a transition into AOS-3. The notification shall include an estimate of the anticipated duration of AOS-3.

   b. Permittee shall record the dates and times of actual transition into AOS-3. Permittee shall make a list, and make a record, of all equipment whose operations have been started up. Permittee shall provide a copy of these records to ADEQ within 7 days.

   c. Permittee may suspend the following monitoring activities for the duration of AOS-3 :

      Monitoring relevant to equipment that is shutdown.

   d. Permittee shall ensure that all COMs and other monitoring gauges are re-calibrated and re-certified before reactivation of process equipment. Re-certification shall be conducted in accordance with a protocol pre-approved by the Director. Permittee shall notify ADEQ of monitor re-certification 14 days in advance, and maintain on record all documents pertaining to re-certification.

   e. Permittee shall record the dates and times when equipment are reactivated. Permittee shall provide a notification to ADEQ within 7 days.

   f. The notifications required in Sub-Paragraphs IX(C)(3)(a), IX(C)(3)(b), IX(C)(3)(d), and IX(C)(3)(e) shall be accompanied by a Certification of Truth, Accuracy, and Completeness. The notifications and certifications shall be signed by the Responsible Official.

X. Miscellaneous Drop Points from Dust Bins and Conveyors

This Section contains permit conditions for drop points into trucks and railcars, and onto the ground, from dust bins and conveyors, that have not already been addressed by Sections II, III, IV, V, VI, VII, or VIII of this Attachment.

A. Emission Limits/Standards

The opacity of any plume or effluent from any drop point shall not exceed 40 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.
[AAC R18-2-702(B)]

B. Air Pollution Control

Permittee shall operate loading sleeves or enclosures to control particulate emissions from drop points. This condition is designated as a material permit condition in accordance with AAC R18-2-331(A)(3)(e).
[PSSIP 6.1, PSSIP 6.2]

C. Monitoring, Reporting, Recordkeeping

Permittee shall conduct a Visible Emission Observation Procedure, as defined in Part I(D), once every two weeks to monitor emissions from drop points.
[AAC R18-2-306(A)(3)(c)]

ATTACHMENT "C": EQUIPMENT LIST
Air Quality Control Permit No. 1000044
For
Chemical Lime Company, Douglas Lime Plant

Name	Make	Model/Serial No	Date of Manufacture	Capacity
LIMESTONE PROCESSING PLANT : REQUIREMENTS IN ATTACHMENT B, SECTION II (see Figure 2 of Attachment E)				
Primary Crusher	KVS 42" X 48" Jaw	u/a	1980	425 tons per hour
Primary Screen	Simplicity	u/a	1994	425 tons per hour
Secondary Screen	Simplicity 6' X 16' 3-deck	u/a	1971	300 tons per hour
Secondary Crusher	El Jay 54" Cone	u/a	1976	300 tons per hour
Seco #1 Secondary Screen	Seco 4' X 12' 2-deck	u/a	pre-1983	300 tons per hour
Seco #2 Secondary Screen	Seco 4' X 12' 2-deck	u/a	pre-1983	300 tons per hour
Seco #3 Secondary Screen	Seco 4' X 12' 2-deck	u/a	pre-1983	300 tons per hour
Conveyor Belts	Open Trough	u/a	pre-1983	< 425 tons per hour
Dust Collector DC 146	Mikropul	48S-8-20	u/a	2725 cubic feet per minute / 453 square feet fabric area
Dust Collector DC 147	Mikropul	64S-8-20	u/a	3625 cubic feet per minute / 604 square feet fabric area

Name	Make	Model/Serial No	Date of Manufacture	Capacity
Dust Collector DC 148	Mikropul	80S-8-20	u/a	4550 cubic feet per minute / 755 square feet fabric area
SOLID FUEL HANDLING SYSTEM : REQUIREMENTS IN ATTACHMENT B, SECTION IV (see Figure 3 of Attachment E)				
Solid Fuel Crusher	Gundlach	27SS	1979	50 tons per hour
Kiln 4 Solid Fuel Mill	Raymond	453	1979	6.13 tons per hour
Kiln 5 Solid Fuel Mill	Raymond	533-A	1979	10.23 tons per hour
Solid Fuel Feed Bin #4	u/a	u/a	1990	45 tons
Solid Fuel Feed Bin #5	u/a	u/a	2000	45 tons
Conveyors	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous
KILN 4 SYSTEM : REQUIREMENTS IN ATTACHMENT B, SECTION V (see Figure 4 of Attachment E)				
Kiln 4 Preheater Screen	Kolberg	4' X 8' 1- Deck	1986	100 tons per hour
Kiln 4	KVS	Rotary Kiln	1967	200 tons per day
Kiln 4 Pug Mill	United Conveyor	u/a	1992	35 tons per hour
Gravel Bed Dust Collector DC 400	Rexnord	10 bed	1972	36000 - 45000 cubic feet per minute
Dust Collector DC 403	WAM	FJA-110	1996	600 cubic feet per minute / 110 square feet filter area

Name	Make	Model/Serial No	Date of Manufacture	Capacity
Dust Bin BN-01	u/a	u/a	u/a	
Bucket Elevator BE-01	u/a	u/a	u/a	
Kiln Dust Bin Dust Collector DC 426	Mikropul	25S-10-20C	1992	1500 cubic feet per minute
Conveyors	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous
KILN 5 SYSTEM : REQUIREMENTS IN ATTACHMENT B, SECTION VI (see Figure 5 of Attachment E)				
Kiln 5 Scalping Screen	u/a	4 ½' X 10'	1995	100 tons per hour
Kiln 5	Traylor	Rotary Kiln	1970	550 tons per day
Kiln 5 Pug Mill	u/a	u/a	1992	35 tons per hour
Kiln Exhaust Baghouse DC 500	Fuller	4M300C14-6	1995	84000 cubic feet per minute / 26000 square feet filter area
Reject Belt Dust Collector DC 522	WAM	FJA-160	1992	1000 cubic feet per minute / 160 square feet filter area
Lime Cooler Dust Collector DC 523	WAM	FJA-250	u/a	1000 cubic feet per minute / 250 square feet filter area

Name	Make	Model/Serial No	Date of Manufacture	Capacity
Kiln 5 Dust Bin Dust Collector DC 524	Mikropul	25S-8-30A	u/a	1200 cubic feet per minute / 236 square feet filter area
T-410 Dust Storage Bin	M-TEC	Type S2415	1991	u/a
Bin T-410 Dust Collector DC 508	I.A.C.	72-TB-BV1-25:S6	2000	600 cubic feet per minute / 243 square feet filter area
Conveyors	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous
KILNS 4 AND 5 LIME HANDLING SYSTEM: REQUIREMENTS IN ATTACHMENT B, SECTION VII (see Figure 6 of Attachment E)				
Rotary Lime Crusher R405	Gundlach	Single Roll	1978-79	50 tons per hour
Rotary Lime Crusher R451	Gundlach	Roll Crusher	1996	50 tons per hour
Hammermill R452	Williams	Hammermill	1996	50 tons per hour
Product Bin 401	u/a	u/a	1988	400 tons
Product Bin 402	u/a	u/a	pre-1970	50 tons
Product Bin 403	u/a	u/a	1989	800 tons
Product Bin 405	u/a	u/a	1996	1000 tons
Product Bin 406	u/a	u/a	1996	1000 tons
Bucket Elevator 432	u/a	u/a	u/a	50 tons per hour
Belt Conveyor 483	u/a	u/a	u/a	24 inches

Name	Make	Model/Serial No	Date of Manufacture	Capacity
Dust Collector DC 401	Wheelabrator	33-36	1996	3100 cubic feet per minute / 448 square feet filter area
Dust Collector DC 402	Wheelabrator	45-36	1996	6240 cubic feet per minute / 996 square feet filter area
Dust Collector DC 406	DCE	DLMV12/10F2	1989	800 cubic feet per minute / 129 square feet filter area
Dust Collector DC 431	Mikropul	25N6-B	1992	1000 cubic feet per minute / 177 square feet filter area
Dust Collector DC 482	WAM	FJA-65	u/a	400 cubic feet per minute / 65 square feet filter area
Dust Collector DC 483	DCE	DU-30-F10	1989	2000 cubic feet per minute / 323 square feet filter area
Dust Collector DC 486	Mikropul	25N6-B	1992	1000 cubic feet per minute / 177 square feet filter area

Name	Make	Model/Serial No	Date of Manufacture	Capacity
Dust Collector DC 487	IAC	84TB-BHWT-144:S6	2001	10000 cubic feet per minute / 1633 square feet filter area
Conveyors	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous
KILN 6 SYSTEM : REQUIREMENTS IN ATTACHMENT B, SECTION VIII (see Figure 7 of Attachment E)				
Kiln 6 Feed Screen	Kohlberg	3' X 6' 1-Deck	1980	100 tons per hour
Twin Shaft Vertical Kiln 6	Maerz	Vertical Kiln	1979	460 tons per day
Kiln 6 Lime Crusher	Gundlach	Double Roll	1979	50 tons per hour
Kiln 6 Lime Screen	Kohlberg	3' X 6' 1-Deck	1986	50 tons per hour
Large Bin	u/a	u/a	u/a	1000 tons
Small Bin	u/a	u/a	u/a	130 tons
Dynamic Wet Scrubber DC 600	Ducon	Size 96 UWA	u/a	30000-38000 cubic feet per minute
Stone Bin and Kiln 6 Feed Screen Dust Collector DC 774	Mikropul	100S-10-20C	1994	7500 cubic feet per minute / 1180 square feet filter area
Kiln Discharge, Reject Conveyor and Product Conveyor Dust Collector DC 775	WAM	FJA110	1994	600 cubic feet per minute / 110 square feet filter area

Name	Make	Model/Serial No	Date of Manufacture	Capacity
Lime Crusher Dust Collector DC 776	Mikropul	16S-10-30B	1994	1200 cubic feet per minute / 180 square feet filter area
Large Bin Dust Collector DC 777	Mikropul	16S-10-30B	1994	1200 cubic feet per minute / 180 square feet filter area
Truck Loadout Dust Collector DC 778	Mikropul	25S-10-30B	1994	1500 cubic feet per minute / 295 square feet filter area
Dust Blend System Rail Loadout Dust Collector DC 779	WAM	FJA-65	1994	400 cubic feet per minute / 65 square feet filter area
Dust Blend System Truck Loadout Dust Collector DC 780	WAM	FJA-65	1994	400 cubic feet per minute / 65 square feet filter area
Dust Blend Bin Dust Collector DC 730	I.A.C.	72-TB-BV1-25:S6	2000	600 cubic feet per minute / 243 square feet filter area
Conveyors	Miscellaneous	Miscellaneous	Miscellaneous	Miscellaneous

u/a : Unavailable

ATTACHMENT "D": HOUSEKEEPING PLAN

Air Quality Control Permit No. 1000044
For
Chemical Lime Company, Douglas Lime Plant

The accumulation of dust in the various plant areas shall be removed by plant employees with the use of a vacuum truck, manual sweeping, and manual shoveling methods. This work shall be completed on a daily routine basis on the catwalks, railings, buildings, around transfer points, and process equipment.

The supervisors in each department shall assign their workers to inspect, and clean as needed, the areas for which they are responsible. On a daily basis each area of the plant shall be inspected by the assigned workers and a "DAILY HOUSEKEEPING INSPECTION AND ACTIVITY REPORT" (Tables 1.1, 1.2, 1.3, and 1.4 of this Attachment) shall be filed. This report shall record the findings of the inspection and the cleanup work performed in the different areas. After recording on the daily report what activity took place in each area, the assigned worker shall sign his (or her) initials next to each of the specified areas listed on the report signifying for the record that the areas were inspected and the cleanup work was performed.

The cleanup activity shall be on an on-going basis and the general practice shall be to clean up identified areas within a 24 hour period. The supervisors shall routinely monitor the plant housekeeping and the daily reports, and manage the cleanup activities to ensure that all areas are being maintained. On a weekly basis the supervisors shall complete the "SUPERVISORS WEEKLY HOUSEKEEPING REPORT" (Tables 2.1, 2.2, and 2.3) to record the main cleanup efforts in the various areas of the plant. The supervisors shall maintain both the daily and weekly reports on file for inspection.

The following descriptions of housekeeping activities use the term "loose dust" to describe the material to be cleaned up. For the purposes of the housekeeping plan, loose dust is defined as the accumulation of fine particulate process material that is capable of becoming airborne.

HOUSEKEEPING PLAN EQUIPMENT AND AREA DESCRIPTIONS

1 Rotary Kiln Areas

1.1 Kiln #4 Dust Collector Area : Clean the loose dust off the dust collector pod discharges, drag conveyors, and the ground below this equipment. Also clean the dust from the top of the dust collector pods and the platform structure.

1.2 Kiln #4 Pier Area : Remove the loose dust from the kiln piers catwalk, the area below the

kiln, and around the kiln piers.

1.3 Kiln #4 Preheater Area : Clean the loose dust off of the preheater platform levels, stone screen, feed belt, and the area below the preheater at ground level.

1.4 Kiln #4 Main Blower Area : Clean the loose dust off the main blower, associated equipment, and the ground surrounding the main blower assembly.

1.5 Kiln #4 Cooler Area : Clean the loose dust off the discharge screw and belt conveyor structures, belt conveyor pit, and the concrete pad.

1.6 Kiln #4 Dust Bin Area : Remove the loose dust from and below dust screw conveyors, and the area surrounding the bucket elevator. Also clean the dust bin platform levels, stairs, pugmill, and the truck loading concrete pad below the dust bin.

1.7 Kiln #5 Dust Collection Area : Clean the loose dust off of the hopper rotary airlocks, the screw conveyors, and ground below this equipment.

1.8 Kiln #5 Pier Area : remove the loose dust from the kiln piers's catwalk, the area below the kiln, and around the kiln piers.

1.9 Kiln #5 Dust Chamber Area : Remove the loose dust from the top of the dust chamber screw conveyor, the surrounding structure, and the ground level area below this equipment.

1.10 Kiln #5 ID Fan Area : Clean the loose dust from the equipment, structure, and ground level areas surrounding the ID fan.

1.11 Kiln #5 Cooler Area : Clean the loose dust off discharge vibrators and belt conveyor structures, and the concrete pad.

1.12 Kiln #5 Dust Bin Area : Clean or vacuum the loose dust on or below the dust screw conveyor, and the area surrounding the bucket elevator. Remove loose dust off the dust bin platforms, pugmill, and the ground level truck loading areas.

1.13 Kiln #5 Stone Feed Areas : Clean up the loose dust out of stone feed tunnels, and off and below the stone feed conveyor structures and catwalks.

1.14 #4 and #5 Coal Ring Dump Area : Remove the loose dust from kiln coal ring collection areas south of the cooler area concrete pads, and north of the first piers.

1.15 #4 and #5 Coal Mill Area : Dispose of the loose dust from the ground level areas surrounding the coal mills. Clean the dust from the coal bin discharge level platform and

related equipment, and the conveyor head pulley and on top of the coal bins.

1.16 #4 and #5 Firedeck Area : Clean up the loose dust off the firedeck platform area at the rotary kilns' discharge.

1.17 Air Compressor Area : Remove the loose dust off the rotary kilns's air compressor and related structures. Clean the dust from the ground on the compressor shelter and surrounding area.

2 Rotary Kiln Lime Storage Areas

2.1 Bin T-402 Open Area : Remove the loose dust from the ground level area surrounding Bin T-402.

2.2 Bin T-403 Open Area : Dispose of the loose dust from the area surrounding Bin T-403.

2.3 Bin T-403/C-483 Tuck Loadout Area : Clean the loose dust off of the top of the bin, stairs, loadout platform, discharge conveyor, and the loose dust at the ground level near or below the bucket elevator, discharge conveyor, and the truck loading concrete pad.

2.4 Kiln Discharge Conveyors : Remove the loose dust off and below the rotary kilns's discharge conveyor structures and catwalks.

3 Vertical Kiln #6 Areas

3.1 Stone Reclaim Area : Clean up the loose dust on the stone reclaim tunnel, and on and below the stone conveyor structure.

3.2 Stone Bin Area : Remove the loose dust from the top of the stone bin, screen structure, bin discharge platform equipment, and the surrounding ground level area.

3.3 Kiln Discharge Area : Clean the loose dust off the discharge feeders, product conveyor structure, and the surrounding concrete pad.

3.4 Product Crushing Area : Remove the loose dust off the crusher equipment and platform level, and off the ground level around and below the bucket elevator and crusher.

3.5 Rail Loadout Belt Area : Clean off the loose dust on and below the rail loadout conveyor belt structure.

3.6 Rail Loading Area : Clean up the loose dust from the rail loadout platform structure and surrounding area.

3.7 Truck Loadout Belt Area : Clean off the loose dust on and below the truck loadout conveyor structure.

3.8 Truck Loading Area : Clean the loose dust off the truck loading platform structure, stairs, and the surrounding ground level area.

3.9 Local Control Room Area : Remove the loose dust from the ground level areas surrounding the local kiln control room.

3.10 Top of Storage Bins : Remove the loose dust from the top elevator platform structure, lime screen structure, top surface of the #6 lime storage bins, and the related catwalks.

3.11 Kiln Levels : Clean up the loose dust off the floors, catwalks, stairs, and related equipment, on each level of #6 vertical kiln.

4 Crushing and Screening Plant Areas

4.1 Area Below Apron feeder : Clean the loose dust off the apron feeder structure and off the concrete floor below.

4.2 Jaw Crusher Area : Clean up the loose dust off the jaw crusher, the upper catwalk and control room, on and below the jaw crusher discharge conveyor belt, and the surrounding ground level floor.

4.3 Cone Crusher Area : Remove the loose dust on and below the cone crusher feed conveyor structure, the cone crusher, the associated catwalk, and the ground level concrete floor.

4.4 Primary Screen Area : Clean the loose dust off the primary screen structure, including the catwalk and ladder, and lower ground level areas.

4.5 Area Below Kiln #6 Belts : remove the loose dust on and below the two kiln #6 stone feed conveyor belt structures.

4.6 Area Below Second - 2" Belt : Remove the loose dust on and below the two conveyor belt structures, and associated catwalks and platforms. Also clean the loose dust off the dust collector structures, and the lower dust collector discharge equipment and concrete floor.

4.7 Secondary Screening Area : Clean the loose dust off the secondary screens and associated platforms and catwalks. Also remove the surrounding ground level loose dust below the secondary screens.

4.8 Area Below the #4 Feed Conveyor : Remove the loose dust on and below the #4 feed conveyor structure.

4.9 Area Below #5 Feed Conveyor : Remove the loose dust on and below the #5 feed conveyor structure.

4.10 Areas Below Flux Conveyors : Remove the loose dust on and below the flux conveyor structures.

4.11 Area Below Chat Conveyor : remove the loose dust on and below the Chat Conveyor structures.

Table 1.1 : Daily Housekeeping Inspection and Activity Report - ROTARY KILN AREAS

Date : _____ I = Inspected C = Cleaned

AREAS	I/C	INITIALS	COMMENTS
1.1 Kiln #4 Dust Collector Area			
1.2 Kiln #4 Pier Area			
1.3 Kiln #4 Preheater Area			
1.4 Kiln #4 Main Blower Area			
1.5 Kiln #4 Cooler Area			
1.6 Kiln #4 Dust Bin Area			
1.7 Kiln #5 Dust Collector Area			
1.8 Kiln #5 Pier Area			
1.9 Kiln #5 Cyclone Area			
1.10 Kiln #5 ID Fan Area			
1.11 Kiln #5 Main Blower Area			
1.12 Kiln #5 Cooler Area			
1.13 Kiln #5 Dust Bin Area			
1.14 Kiln #5 Stone Feed Areas			
1.15 #4 and #5 Coal Ring Dump Areas			
1.16 #4 and #5 Coal Mill Areas			
1.17 #4 and #5 Firedeck Areas			
1.18 Air Compressor Area			
Other :			

Comments : _____

Table 1.2 : Daily Housekeeping Inspection and Activity Report - ROTARY KILN LIME STORAGE AREAS

Date : _____ I = Inspected C = Cleaned

AREAS	I/C	INITIALS	COMMENTS
2.1 Bin #3 Open Area			
2.2 Bin #5 Open Area			
2.3 Bin #5 Truck Loadout Area			
2.4 Old Bins Upper Level			
2.5 Concrete Level Below Old Bins			
2.6 Old Bins Truck Loadout Area			
2.7 Old Bins Discharge Level			
2.8 Old Bins Lime Transfer Area			
2.9 Kiln Discharge Conveyors			
2.10 Conveyors to #5 Bin			
2.11 Coal and Coke Area			
Other :			

Comments : _____

_____

Table 1.3 : Daily Housekeeping Inspection and Activity Report - VERTICAL KILN #6 AREAS

Date : _____ I = Inspected C = Cleaned

AREAS	I/C	INITIALS	COMMENTS
3.1 Stone Reclaim Area			
3.2 Stone Bin Area			
3.3 Kiln Discharge Area			
3.4 Product Crushing Area			
3.5 Rail Loadout Belt Area			
3.6 Rail Loading Area			
3.7 Truck Loadout Belt Area			
3.8 Truck Loading Area			
3.9 Local Control Room Area			
3.10 Tops of Storage Bins			
3.11 Kiln Levels			
Other :			

Comments : _____

_____

Table 1.4 : Daily Housekeeping Inspection and Activity Report - CRUSHING AND SCREENING PLANT AREAS

Date : _____ I = Inspected C = Cleaned

AREAS	I/C	INITIALS	COMMENTS
4.1 Area Below Apron Feeder			
4.2 Jaw Crusher Pit Area			
4.3 Cone Crusher Area			
4.4 Primary Screen Area			
4.5 Area Below Kiln #6 Belts			
4.6 Area Below Second -2" Belt			
4.7 Secondary Screening Area			
4.8 Area Below #4 feed Conveyor			
4.9 Area Below #5 Feed Conveyor			
4.10 Area Below Flux Conveyors			
4.11 Area Below Chat Conveyor			
Other :			

Comments : _____

_____

Table 2.1 : Supervisor's Weekly Housekeeping Report - ROTARY KILNS AND LIME STORAGE AREAS

WEEK BEGINNING : _____

DAY	ACTIVITIES
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

Table 2.2 : Supervisor's Weekly Housekeeping Report - VERTICAL KILN #6 AND LIME STORAGE AREAS

WEEK BEGINNING : _____

DAY	ACTIVITIES
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

Table 2.3 : Supervisor's Weekly Housekeeping Report - CRUSHING AND SCREENING PLANT AREAS

WEEK BEGINNING : _____

DAY	ACTIVITIES
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

ATTACHMENT "E": PLANT SCHEMATICS

Air Quality Control Permit No. 1000044
For
Chemical Lime Company, Douglas Lime Plant

PLACE HOLDER FOR FIGURE 1

PLACE HOLDER FOR FIGURE 2

PLACE HOLDER FOR FIGURE 3

PLACE HOLDER FOR FIGURE 4

PLACE HOLDER FOR FIGURE 5

PLACE HOLDER FOR FIGURE 6

PLACE HOLDER FOR FIGURE 7